

## **Hydraulics...What does this mean and how does it relate to my pool?**

Proper hydraulics is one of the keys to a clean and healthy swimming pool . Hydraulic design is defined as the engineering of fluid movement, in this case the water in your swimming pool. To give an example of this concept, think of a coffee stir-stick and a regular straw for your beverage of choice. Both utensils will allow water to move through them but it will take more energy from you to get the liquid through the stir-stick, because the inner diameter is smaller.

Your swimming pool is nothing more than a container of water. The Plumbing serves as the channel the water moves through to be filtered, which is similar to the straw described above.

- Without good hydraulic design of the plumbing, your pump will use more electricity because it will be working harder.
- Without good hydraulic design your pool can not have equal flow through the returns in the pool resulting in poor circulation and inadequate chemical agitation and debris control.
- Without good hydraulic design, you will end up spending more time and money trying to balance your water and keeping it that way.

At Swim World Pools, it is important to us that your pool be efficient. We spend the extra time and money for the plumbing materials to ensure your pool has good hydraulic design. Some of the areas of consideration must be proper sizing of pool pumps and filters, as well as proper sizing of plumbing runs. Bigger pumps are not always better. Some Companies sell BIGGER PUMPS. It would be a big mistake by consumers to assume that the contractor would upsize both the filter and the piping to accommodate the additional size and power of the pump. Additionally, you can have a situation where the pump is too small for the filter or piping. The biggest abuse we see, is the inadequate, or wrong application of pool equipment, which causes excessive friction losses, resulting in wasted energy and money.

It is important to us at Swim World Pools that the pools we build are not only for today but for tomorrow.